

# **FOLDABLE CHAIR ASSEMBLY**

## **BACKGROUND OF THE INVENTION**

### **1. Field of the Invention**

The present invention relates to a foldable chair assembly, and more particularly to a foldable chair assembly that can be folded and expanded easily and conveniently, thereby facilitating the user operating the foldable chair assembly.

### **2. Description of the Related Art**

A conventional chair has a fixed size and cannot be folded, thereby occupying larger space when not in use. The foldable chair can be expanded when in use and can be folded when not in use so as to save the space, thereby facilitating the user storing the conventional foldable chair. However, the conventional foldable chair tends to be folded unintentionally, thereby causing danger to the user.

## **SUMMARY OF THE INVENTION**

The primary objective of the present invention is to provide a foldable chair assembly that is folded and expanded easily and conveniently, thereby facilitating the user operating the foldable chair assembly.

Another objective of the present invention is to provide a foldable chair assembly, wherein when the foldable chair assembly is disposed at the normally stretched state, the limit rod is rested on the mediate portion of the

second support leg, so that the first support leg is combined with the second support leg so as to support the support frame and the seat rigidly and stably.

A further objective of the present invention is to provide a foldable chair assembly, wherein when the foldable chair assembly is disposed at the normally stretched state, the bent portion of each of the two resting members has an opening facing downward.

A further objective of the present invention is to provide a foldable chair assembly, wherein when the foldable chair assembly is disposed at the folded state, the bent portion of each of the two resting members has an opening facing upward.

In accordance with the present invention, there is provided a foldable chair assembly, comprising:

- a support frame;

- a first support leg having an upper portion pivotally mounted on a bottom of the support frame;

- a second support leg having an upper portion pivotally mounted on the bottom of the support frame; and

- two opposite resting members each pivotally mounted between a mediate portion of the first support leg and a mediate portion of the second support leg.

Further benefits and advantages of the present invention will become apparent after a careful reading of the detailed description with appropriate reference to the accompanying drawings.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

5            Fig. 1 is a perspective view of a foldable chair assembly in accordance with the preferred embodiment of the present invention;

             Fig. 2 is a partially perspective view of the foldable chair assembly in accordance with the preferred embodiment of the present invention;

             Fig. 2A is a partially enlarged view of the foldable chair assembly as  
10    shown in Fig. 2;

             Fig. 2B is a plan cross-sectional view of the foldable chair assembly as shown in Fig. 2A;

             Fig. 3 is an exploded perspective view of the foldable chair assembly as shown in Fig. 2;

15            Fig. 4 is a plan view of the foldable chair assembly as shown in Fig. 1;

             Fig. 5 is a schematic operational view of the foldable chair assembly as shown in Fig. 4;

             Fig. 6 is a schematic operational view of the foldable chair assembly  
20    as shown in Fig. 5;

             Fig. 7 is a plan view showing the folded state of the foldable chair assembly as shown in Fig. 1;

Fig. 8 is a schematic operational view of the foldable chair assembly as shown in Fig. 7; and

Fig. 9 is a schematic operational view of the foldable chair assembly as shown in Fig. 8.

## **DETAILED DESCRIPTION OF THE INVENTION**

Referring to the drawings and initially to Figs. 1-4, a foldable chair assembly in accordance with the preferred embodiment of the present invention comprises a support frame 4, a first support leg 1 having an upper portion pivotally mounted on a bottom of the support frame 4, a second support leg 2 having an upper portion pivotally mounted on the bottom of the support frame 4, and two opposite resting members 3 each pivotally mounted between a mediate portion of the first support leg 1 and a mediate portion of the second support leg 2. Preferably, each of the first support leg 1 and the second support leg 2 is substantially U-shaped.

The bottom of the support frame 4 is provided with a plurality of pivot ears 41 for pivoting the upper portion of each of the first support leg 1 and the second support leg 2 by a plurality of pivot pins 52. The foldable chair assembly further comprises a seat 6 mounted on the support frame 4. In addition, the second support leg 2 has a length greater than that of the first support leg 1, so that the support frame 4 and the seat 6 are disposed at an inclined state.

As shown in Figs. 2A and 2B, each of the two resting members 3 is substantially V-shaped and has a first end pivotally mounted on an inner side of the first support leg 1 by a first pin 5 and a second end pivotally mounted on an outer side of the second support leg 2 by a second pin 51.

5 In addition, the mediate portion of the first support leg 1 is provided with a substantially  $\Omega$ -shaped limit rod 11 rested on the mediate portion of the second support leg 2. Preferably, the limit rod 11 is located at an intersection of the first support leg 1 and the second support leg 2 and is located above the first pin 5 at the first end of each of the two resting members 3.

10 As shown in Figs. 2 and 4, each of the two resting members 3 is formed with a bent portion 30 located adjacent to the first end of each of the two resting members 3. The bent portion 30 of each of the two resting members 3 has an opening facing downward when the foldable chair assembly is disposed at an extended state as shown in Fig. 4.

15 Referring to Figs. 4-6 with reference to Figs. 1-3, the limit rod 11 is initially rested on the mediate portion of the second support leg 2 as shown in Fig. 4, so that the first support leg 1 is combined with the second support leg 2 so as to support the support frame 4 and the seat 6 rigidly and stably.

When the user wishes to fold the foldable chair assembly, a first side  
20 40 of the support frame 4 is pulled upward to move the first support leg 1 upward, so that each of the two resting members 3 are pivoted about the second pin 51 in the counterclockwise direction to move from the position as shown in

Fig. 4 to the position as shown in Fig. 5, thereby detaching the limit rod 11 from the mediate portion of the second support leg 2 as shown in Fig. 5. Thus, the second support leg 2 is movable relative to the first support leg 1. Then, a second side 42 of the support frame 4 is pressed downward to move the second support leg 2 downward, so that each of the two resting members 3 are pivoted about the first pin 5 in the counterclockwise direction to move from the position as shown in Fig. 5 to the position as shown in Fig. 6. Thus, the first support leg 1 and the second support leg 2 are pivoted relative to each other to move toward the support frame 4, so that the first support leg 1 and the second support leg 2 are rested on the bottom the support frame 4, thereby folding the foldable chair assembly as shown in Fig. 6. At this time, the bent portion 30 of each of the two resting members 3 has an opening facing upward when the foldable chair assembly is disposed at a folded state as shown in Fig. 6.

Referring to Figs. 7-9 with reference to Figs. 1-6, when the user wishes to extend the foldable chair assembly, the first support leg 1 and the second support leg 2 are pivoted relative to each other to move outward relative to the support frame 4, so that the first support leg 1 and the second support leg 2 are spaced away from the bottom the support frame 4. Then, the second side 42 of the support frame 4 is pulled upward to move the second support leg 2 upward, so that each of the two resting members 3 are pivoted about the first pin 5 in the clockwise direction to move from the position as shown in Fig. 7 to the position as shown in Fig. 8. Then, the first side 40 of the

support frame 4 is pressed downward to move the first support leg 1 upward, so that each of the two resting members 3 are pivoted about the second pin 51 in the clockwise direction to move from the position as shown in Fig. 8 to the position as shown in Fig. 9, where the limit rod 11 is rested on the mediate  
5 portion of the second support leg 2, thereby expanding the foldable chair assembly as shown in Fig. 9. Thus, the limit rod 11 is rested on the mediate portion of the second support leg 2 as shown in Fig. 9, so that the first support leg 1 is combined with the second support leg 2 so as to support the support frame 4 and the seat 6 rigidly and stably. At this time, the bent portion 30 of  
10 each of the two resting members 3 has an opening facing downward when the foldable chair assembly is disposed at the expanding state as shown in Fig. 9.

Accordingly, the foldable chair assembly can be folded and expanded easily and conveniently, thereby facilitating the user operating the foldable chair assembly. In addition, when the foldable chair assembly is  
15 disposed at the normally stretched state, the limit rod 11 is rested on the mediate portion of the second support leg 2, so that the first support leg 1 is combined with the second support leg 2 so as to support the support frame 4 and the seat 6 rigidly and stably. Further, when the foldable chair assembly is disposed at the normally stretched state, the bent portion 30 of each of the two  
20 resting members 3 has an opening facing downward. Further, when the foldable chair assembly is disposed at the folded state, the bent portion 30 of each of the two resting members 3 has an opening facing upward.

Although the invention has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended  
5 claim or claims will cover such modifications and variations that fall within the true scope of the invention.